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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|-------------------------|------------------|
| 09/830,730 | 04/30/2001 | Georg Assmann | H 3232 PCT/U | 2026 |
| 7590 10/22/2003 | | | EXAMINER | |
| Glenn E J Murphy | | | SASTRI, SATYA B | |
| Henkel Corpora Suite 200 | ation . | | ART UNIT | PAPER NUMBER |
| 500 Renaissance Boulevard | | | 1713 | |
| Gulph Mills, PA 19406 | | | DATE MAILED: 10/22/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

U.S. Patent and Trademark Office PTOL-326 (Rev. 04-01)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)

Notice of Informal Patent Application (PTO-152)

Other:

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DETAILED ACTION

1. This office action is in response to the paper no. 4 of the application filed on April 30, 2001. Acknowledgement is made of the cancellation of *claims 1-16* and addition of new *claims* 17-47. Claims 17-47 are now pending in the application.

Specification

- 2. Claim 17 has a missing word in line 7.
- 3. *Claims 17-47* allude to "soluble polymer granules". However, "water soluble polymer granules" may be more specific or appropriate.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102 and 103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 36-38 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Denzinger et al. (US 4,698,174).

The prior art to Denzinger et al. relates to pulverulent and/or granular additives for detergent and cleaning agents, consisting of (a) from 80 to 20% by weight of one or more copolymers comprising from about 40 to 90% by weight of (meth)acrylic acid and from 60 to 10% by weight of maleic acid and/or one or more copolymers comprising from 10 to 45% by weight of (meth)acrylic acid, from 10 to 45% by weight maleic acid and from 10 to 60% by weight of one or more hydroxyalkyl (meth)acrylate, if appropriate in the form of a partially or completely neutralized water-soluble salt, (b) from 20 to 80% by weight of nitroacetic acid or its salt and (c) 0 to 20% by weight of one or more additives conventionally used for detergent and cleaning agent (abstract). Thus, claims 36-38 and 47 are anticipated by Denzinger et al.

7. Claim 39 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Denzinger et al. (US 4,698,174).

The prior art to Denzinger et al. is disclosed in paragraph 6 above and is incorporated herein by reference. The prior art does not disclose details on the molecular weight of the soluble

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polycarboxylate copolymer. However, given the broad range of the molecular weight in the instant claim (*claim 39*), a reasonable basis exists to believe that the prior art polymer would inherently have molecular weight within the claimed range. It has been held that where applicant claims a composition in terms of function, property or characteristic where said function is not explicitly shown by the reference and where the examiner has explained why the function, property or characteristic is considered inherent in the prior art, it is appropriate for the examiner to make a rejection under <u>both</u> the applicable section of 35 USC 102 <u>and</u> 35 USC 103 such that the burden is placed upon the applicant to provide clear evidence that the respective compositions do in fact differ. *In re Best*, 195 USPQ 430, 433 (CCPA 1977); *In re Fitzgerald et al.*, 205 USPQ 594, 596 (CCPA 1980).

Allowable Subject Matter

- 8. Claims 17-35 are allowed.
- 9. Claims 40-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. The following is an examiner's statement of reasons for allowance:

The present claims are allowable over the closest reference to Denzinger et al. (US 4,698,174) and Sato et al. (US 4,386,120).

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The present invention discloses a process for production of soluble polymer granules comprising the steps of simultaneously granulating and drying, in a fluidized bed dryer having a diffusor plate, a water-based preparation comprising at least 30% by weight of one or more water soluble polymers, in which drier with one or more air inlets above the diffusor plate produces an eddy flow in the bed about the vertical axis.

The prior art to Denzinger et al. discloses a process for the production of water-soluble polymer granules in a fluidized bed by drying in a fluidized bed but does not disclose the fluidized bed dryer as having a diffusor plate with air inlets above the diffusor plate to produce an eddy flow in the bed about the vertical axis. Additionally, the prior art teaches soluble polymer granules based on (meth)acrylic acid or maleic acid but does not teach granule granule composition based on copolymers of vinyl pyrrolidone or soluble (co)polymers with additives such as dextrin or inorganic carriers.

The prior art to Sato et al. discloses a process or producing polyacrylic acid salt granules by fluidized bed granulation device that include fluidized bed, modified fluidized bed type or jet bed type (column 2) but do not teach fluidized bed dryer having a diffusor plate, a water-based preparation comprising at least 30% by weight of one or more water soluble polymers, in which drier with one or more air inlets above the diffusor plate produces an eddy flow in the bed about the vertical axis.

Therefore, the instantly claimed invention is deemed allowable over the closest prior art of record as per said art neither anticipating nor rendering obvious the instantly claimed process for production of soluble polymer granules or the composition. There is no teaching or suggestion or motivation to modify the prior art processes or compositions.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (703) 305-8490.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (703) 308-2450.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 308-0661.

SATYA SASTRI

October 21

DAVID W WIL

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700